

Claims

- [c1] 1. A system for receiving and playing movies, the system comprising:
a personal computer with Internet connectivity and having a browser for selecting movies from an online catalog;
a set-top box with Internet connectivity, the set-top box having a hard disk for storing encrypted copies of the selected movies that the set-top box receives in response to user selections from the online catalog; and
a television device, connected to the set-top box, for playing back decrypted copies of the selected movies that have been purchased for playback.
- [c2] 2. The system of claim 1, wherein the system includes a local network that both the personal computer and set-top box are connected to.
- [c3] 3. The system of claim 2, wherein the local network includes a selected one of a HomePlug, an HPNA, an Ethernet, and a wireless network.
- [c4] 4. The system of claim 1, wherein the set-top box is capable of media decryption.

- [c5] 5. The system of claim 1, wherein the set-top box is capable of transferring received movies to other set-top boxes.
- [c6] 6. The system of claim 5, wherein the set-top box transfers movies that it receives to other set-top boxes using peer-to-peer connectivity.
- [c7] 7. The system of claim 1, wherein the set-top box receives some of the selected movies from a media server.
- [c8] 8. The system of claim 1, wherein the set-top box receives some of the selected movies from other set-top boxes.
- [c9] 9. The system of claim 1, wherein the set-top box receives some of the selected movies from other set-top boxes via peer-to-peer connectivity.
- [c10] 10. The system of claim 9, wherein the peer-to-peer connectivity between set-top boxes is controlled by a central server.
- [c11] 11. The system of claim 10, wherein the central server schedules movies for transfer, based on movies desired to be played back at various set-top boxes.
- [c12] 12. The system of claim 1, wherein the browser may be

used to manage customer account information.

- [c13] 13. The system of claim 1, wherein the set-top box displays a selection cursor on the television device, allowing a user to select movies for playback.
- [c14] 14. The system of claim 1, wherein a user may enter purchase information using the set-top box and the television device.
- [c15] 15. The system of claim 1, wherein the online catalog may also be displayed on the television device by the set-top box.
- [c16] 16. The system of claim 1, wherein the online catalog is downloaded to a local database at the set-top box.
- [c17] 17. The system of claim 1, wherein the set-top box includes program logic for secure initialization preventing the set-top box from being made to run unauthorized programs, thereby protecting encrypted movies stored on the set-top box.
- [c18] 18. The system of claim 1, wherein the set-top box includes capability for one-chip decryption and playback of the selected movies, thereby securing encrypted copies of the selected movies against unauthorized use.
- [c19] 19. An improved method for purchasing movies for play-

back, the method comprising:
displaying an online catalog for a user to select movies for playback;
receiving encrypted copies of selected movies at a set-top box with Internet connectivity, at least some of the encrypted copies being received from other set-top boxes;
receiving purchase information from the user for a particular one of the selected movies that have been received at the set-top box; and
in response to the purchase information, authorizing playback of the particular one of the selected movies.

[c20] 20. The method of claim 19, wherein encrypted copies received at the set-top box are stored on a hard disk.

[c21] 21. The method of claim 19, further comprising:
providing feedback to the user indicating transfer status of each movie being received.

[c22] 22. The method of claim 19, further comprising:
transferring movies received at the set-top box to other set-top boxes.

[c23] 23. The method of claim 22, wherein the transferred movies are transferred from the set-top box to other set-top boxes using peer-to-peer connectivity.

- [c24] 24. The method of claim 23, wherein the peer-to-peer connectivity is controlled by a server.
- [c25] 25. The method of claim 19, wherein the user selects movies from the online catalog using a browser.
- [c26] 26. The method of claim 19, wherein the user selects movies from the online catalog using the set-top box connected to a television.
- [c27] 27. The method of claim 19, wherein at least some of the selected movies are received from a central repository.
- [c28] 28. The method of claim 27, wherein the central repository includes multiple media servers storing encrypted copies of movies.
- [c29] 29. The method of claim 19, further comprising:
in response to the authorizing step, decrypting the particular movie purchased and playing it back on a television.
- [c30] 30. The method of claim 29, further comprising:
checking account status of the user before decrypting the particular movie.
- [c31] 31. The method of claim 29, further comprising:

checking geographic location of the set-top box before decrypting the particular movie.

- [c32] 32. The method of claim 19, wherein playback is authorized for a limited period of time.
- [c33] 33. The method of claim 19, further comprising:
creating a priority list for each user, based on user selections from the online catalog, said priority list controlling at least in part which movies are received at a given set-top box.
- [c34] 34. The method of claim 19, wherein said step of receiving encrypted copies of selected movies includes receiving encrypted copies of movies selected based, at least in part, on predicted demand for movies.
- [c35] 35. The method of claim 19, wherein said step of receiving encrypted copies of selected movies includes receiving encrypted copies selected based, at least in part, on optimizing distribution of movies to a plurality of set-top boxes.
- [c36] 36. A computer-readable medium having processor-executable instructions for performing the method of claim 19.
- [c37] 37. A downloadable set of processor-executable instruc-

tions for performing the method of claim 19.

- [c38] 38. An improved set-top box device comprising:
a processor and a memory;
a module, responsive to commands from a server, for receiving encrypted media content from other set-top boxes;
a storage module for storing said encrypted media content;
a decryption module for decrypting said encrypted media content for playback; and
a module, responsive to commands from a server, for transferring encrypted media content stored on the storage device to other set-top boxes.
- [c39] 39. The device of claim 38, wherein the media content includes audio/video content.
- [c40] 40. The device of claim 38, wherein the device includes broadband connectivity.
- [c41] 41. The device of claim 40, wherein said broadband connectivity includes a local network with Internet connectivity.
- [c42] 42. The device of claim 41, wherein the local network comprises a home network.

- [c43] 43. The device of claim 40, wherein broadband connectivity is provided by a selected one of a cable modem and a DSL modem.
- [c44] 44. The device of claim 38, wherein the device includes peer-to-peer connectivity to other devices.
- [c45] 45. The device of claim 38, wherein the device may also receive encrypted media content from a central repository.
- [c46] 46. The device of claim 38, wherein the device includes connectivity to a personal computer.
- [c47] 47. The device of claim 46, wherein the device stores at least some of the received encrypted media content on the personal computer.
- [c48] 48. A method for providing video content to a client device for playback, the method comprising:
connecting the client device to a broadband connection to provide the client device with access to the Internet;
displaying a catalog of available videos at a Web server accessible to the client device through the broadband connection;
in response to a request for delivery of a selected video available in the catalog at the Web server, transferring an encrypted copy of the selected video to the client device;

and

in response to a user requesting playback of the selected video at the client device, providing a decryption key enabling the decryption and playback of the selected video at the client device.

- [c49] 49. The method of claim 48, further comprising:
rendering the selected video on a display device connected to the client device.
- [c50] 50. The method of claim 49, wherein said display device comprises a television and the client device comprises a set-top box capable of rendering videos on the television.
- [c51] 51. The method of claim 50, wherein said set-top box includes capability for decrypting videos in encrypted form.
- [c52] 52. The method of claim 51, wherein said set-top box includes capability for one-chip decryption and rendering of videos in encrypted format, thereby serving to secure said encrypted videos against unauthorized use.
- [c53] 53. The method of claim 48, wherein said connecting step includes connecting using a selected one of a cable modem and a DSL modem.

- [c54] 54. The method of claim 48, wherein said connecting step includes connecting the client device to the broadband connection using a selected one of wireless networking, wireline networking, powerline networking, and phone line networking.
- [c55] 55. The method of claim 48, wherein the client device includes powerline networking capability for connecting to the broadband connection.
- [c56] 56. The method of claim 48, wherein said step of transferring an encrypted copy includes substeps of:
locating a peer client device on the Internet having an encrypted copy of the selected video; and
transferring the encrypted copy of the selected video from the peer client device to the client device.
- [c57] 57. The method of claim 56, wherein the peer client device comprises a set-top box client having peer-to-peer connectivity with the client device.
- [c58] 58. The method of claim 48, wherein said step of providing a decryption key includes issuing a request for the decryption key to the Web server in response to a user requesting playback at the client device.
- [c59] 59. The method of claim 58, wherein said Web server obtains payment authorization for the video before pro-

viding the decryption key.

- [c60] 60. The method of claim 48, further comprising:
storing videos received in encrypted format at the client device.
- [c61] 61. The method of claim 60, further comprising:
initializing the client device using a secure client device boot process, thereby serving to secure said videos stored on the client device.
- [c62] 62. The method of claim 60, further comprising:
in response to an instruction from the Web server, transmitting a copy of a given video stored in encrypted format at the client device to another client having peer-to-peer connectivity with the client device.
- [c63] 63. A computer-readable medium having processor-executable instructions for performing the method of claim 48.
- [c64] 64. A downloadable set of processor-executable instructions for performing the method of claim 48.
- [c65] 65. A system for obtaining and playing media files, the system comprising:
a connection module for providing a set-top box with Internet access;

a set-top box having a user interface for requesting media files from an online catalog on a server available via the Internet, storage capacity for storing media files received in response to requests for media files, and capability for rendering media files for playback; and a television device connected to the set-top box for playing media files.

- [c66] 66. The system of claim 65, wherein said media files comprise various file types.
- [c67] 67. The system of claim 65, wherein said media files comprise selected ones of audio files and video files.
- [c68] 68. The system of claim 65, wherein said media files include encrypted media files.
- [c69] 69. The system of claim 68, wherein said set-top box includes capability for decrypting encrypted media files.
- [c70] 70. The system of claim 68, wherein the set-top box includes capability for one-chip decryption and rendering of encrypted media files, thereby serving to secure said encrypted media files against unauthorized use.
- [c71] 71. The system of claim 65, wherein said connection module comprises a broadband connection to the Internet.

- [c72] 72. The system of claim 71, wherein said broadband connection comprises a selected one of a cable modem and a DSL modem.
- [c73] 73. The system of claim 71, wherein said connection module includes a selected one of wireless networking, wireline networking, powerline networking, and phone line networking for connecting the set-top box to said broadband connection.
- [c74] 74. The system of claim 71, wherein the set-top box includes a powerline network adapter for connecting to the broadband connection via powerline networking.
- [c75] 75. The system of claim 65, wherein said server arranges delivery of media files to the set-top box in response to requests received from the set-top box.
- [c76] 76. The system of claim 75, wherein said server arranges delivery of media files from another device having peer-to-peer connectivity with the set-top box.
- [c77] 77. The system of claim 65, wherein said server arranges delivery of media files stored on the set-top box to another device having peer-to-peer connectivity with the set-top box.
- [c78] 78. The system of claim 65, wherein said user interface

of the set-top box enables a user to assign priorities to media files that the user wishes to receive.

- [c79] 79. The system of claim 78, wherein said server arranges delivery of media files to the set-top box based, at least in part, on the priorities assigned by the user.
- [c80] 80. The system of claim 65, wherein said set-top box includes program logic for providing payment authorization to the server in exchange for authorization to play the media file at the set-top box.
- [c81] 81. The system of claim 65, wherein the set-top box includes program logic for secure initialization, thereby serving to secure said media files stored on the set-top box.
- [c82] 82. The system of claim 65, further comprising:
a remote control device for a user to issue instructions to the set-top box.
- [c83] 83. The system of claim 82, wherein a user may select media files for playback using said remote control device.
- [c84] 84. The system of claim 82, wherein a user may request media files available in the catalog using said remote control device.

